REMARKS

Reconsideration of the instant application is respectfully requested in view of the amendments above and the following remarks. No amendments to the claims have been made. The specification is amended to perfect the claim of priority. The petition for perfecting the claim of priority is submitted with this Response.

A. Examiner's comments regarding Response to Restriction/Election Requirement

Applicants respectfully disagree with the Examiner's misinterpretation of Applicant's response, namely, with the Examiner's conclusion that SEQ ID NOs 1-8 are obvious over each other. See *Office Action* at 2.

The fact that two sequences share certain functional and structural characteristics does not make them obvious over each other. The test of obviousness of the species recited in the Markush claim is articulated in MPEP § 803.02, which states that

> [a] Markush-type claim may include independent and distinct inventions. This is true where two or more of the members are so unrelated and diverse that a prior art reference anticipating the claim with respect to one of the members would not render the claim obvious under 35 U.S.C. 103 with respect to the other member(s).

In the instant case, fragments of LMP-1 or LMP-3 proteins are not obvious over the prior art references cited by the Examiner. For example, how would one of skill in the art know or guess SEQ ID NO: 7 armed only with the knowledge of LMP-1 sequence disclosed, e.g., in Hair? Accordingly, Applicants respectfully maintain that sequences recited, e.g, in claim 34 are not obvious over each other.

B. Rejections based on 35 U.S.C § 103

With respect to rejections based on Hair (U.S. Patent 6,300,123) and Boden (Endocrinology 1998, 139(12): 5125-5134), Applicants respectfully note that the specification of the instant application has been amended to perfect the priority of the instant application. As a result, Boden and Hair cited by the Examiner, are not proper prior art references. For these reasons, Applicants respectfully request the Examiner to withdraw these grounds for rejection.

C. Double Patenting Rejections.

The Examiner rejected the claims of the instant application under the obviousness-type double patenting doctrine as unpatentable in view of a combination of Nagahara and either U.S. Patent 6,858,431 or U.S. Patent 6,521,750. Applicants respectfully request that these rejection be held in abeyance until all other rejection grounds are removed.

D. Miscellaneous

Applicants submit a list of co-pending applications and issued patents assigned to the assignee of the instant application. This list is attached hereto as Exhibit A.

Submission of this list should not be construed as an admission that the claims of the instant application and the claims of the applications or patent listed in Attachment A are co-extensive or obvious over each other.

CONCLUSION

Applicants believe that they have fully responded to the Examiner's concerns, and the claims of the instant application are in condition for allowance. Applicants request that any questions concerning this matter be directed to the undersigned at (609) 844-3021.

Please charge any deficiency and/or credit any overpayment to Deposit Account No. 50-1943. Thank you for your kind consideration in this matter.

Respectfully submitted,

Date: January 24, 2008

Vyacheslav Vasilyev
Reg. No. 58,154
Fox Rothschild LLP
Princeton Pike Corporate Center
997 Lenox Drive, Building 3
Lawrenceville, NJ 08648-2311
Phone: (609) 844-3021
Facsimile : (609) 896-1469

EXHIBIT A

	PAT. NO.	Title
1	7,252,685	Fusion implant and method of making same
2	7,172,629	Osteogenic paste compositions and uses thereof
3	7,045,614	LIM mineralization protein splice variants
4	7,045,125	Biologically active composites and methods for their production and use
5	7,018,415	Expandable spinal fusion device and methods of promoting spinal fusion
6	6,890,728	Methods of isolating blood components using a microcentrifuge and uses thereof
7	6,858,431	Bone mineralization proteins, DNA, vectors expression systems
8	6,521,750	Bone mineralization proteins, DNA, vectors, expression systems
9	6,444,803	Bone mineralization proteins, DNA, vectors, expression systems
10	6,300,127	Bone mineralization proteins, DNA, vectors, expression systems

	PUB. APP. NO.	APP. SERIAL NO.	PUB. APP. NO.
1	20070276489	11/835,091	Fusion implant and method of making same
2	20070259030	11/418,948	Methods, systems and reagents for tendon and ligament therapy
3	20070243228	11/403,733	Drug depot implant designs and methods of implantation
4	20070243225	11/734,618	Drug depot implant designs and methods of implantation
5	20070191591	11/633,963	Smurf1 independent mechanism of osteoinduction of LMP-3 protein
6	20070190572	11/607,348	Methods and kits using a molecular interaction between a Smurf-1 WW domain and LIM mineralization protein isoforms
7	20070134218	11/602,805	Methods of inducing or increasing the expression of proteoglycans such as aggrecan in cells
8	20070128249	11/670,804	Osteogenic paste compositions and uses thereof
9	20070116689	11/433,059	LIM mineralization protein splice variants
10	20070099176	11/545,349	Methods of expressing LIM mineralization protein
11	20070027081	11/385,612	Mechanisms of osteoinduction by LIM mineralization protein-1 (LMP-1)
12	20070009493	11/443,387	Chondrogenic compositions and methods of use
13	20060293757	11/158,924	Osteograft treatment to promote osteoinduction and osteograft incorporation
14	20060259006	11/118,125	Devices and methods for delivering medical agents

15	20060149385	11/332,959	Expandable spinal fusion device and methods of promoting spinal fusion
16	20060046961	11/091,348	Controlled and directed local delivery of anti-inflammatory compositions
17	20060046960	10/932,878	Controlled and directed local delivery of anti-inflammatory compositions
18	20060019392	10/951,236	Novel bone mineralization proteins, DNA, vectors, expression systems
19	20050130301	10/887,275	Isolation of bone marrow fraction rich in connective tissue growth components and the use thereof to promote connective tissue formation
20	20040249471	10/455,760	Fusion implant and method of making same
21	20040197867	10/806,915	Intracellular delivery of osteoinductive proteins and peptides
22	20040064058	10/399,836	Methods and instruments for treating pseudoarthrosis
23	20040034428	10/399,830	Spinal fusion methods and devices
24	20040002558	09/923,117	Osteogenic paste compositions and uses thereof
25	20030225021	10/382,844	Methods of inducing the expression of bone morphogenetic proteins (BMPs) and transforming growth factor-beta proteins (TGF-betas) in cells
26	20030180266	10/292,951	Methods of expressing LIM mineralization protein in non-osseous cells
27	20030125248	09/986,625	Novel bone mineralization proteins, DNA, vectors expression systems
28	20020182664	10/116,729	Methods of isolating blood components using a microcentrifuge and uses thereof
29	20020127720	10/035,797	Biologically active composites and methods for their production and use
30	20020086987	09/986,621	Novel bone mineralization proteins, DNA, vectors, expression systems
31	20020082694	09/923,116	Highly-mineralized osteogenic sponge compositions, and uses thereof